

ABSTRACT

A steam pressure reducing and conditioning valve for passing a superheated steam S inflowing from a first port 1 through a pressure reducing section 2, and, supplying subcooled water mist W and discharging desuperheated and depressurized steam S_2 from a second port 3, wherein a first nozzle 4 for supplying mist W is provided in proximity to said pressure reducing section 2. Said nozzle 4 injects subcooled water mist in a planar pattern r perpendicular to the flow of depressurized steam S_1 . Said first nozzle 4 is disposed such that there is a predetermined distance L between 10 the jet pattern r of moisture W injected from the nozzle and said pressure reducing section 2.

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